

Attorney Docket 030006
U.S. Application No. 10/720,941 Examiner Tran Art Unit 2151
Response to November 27, 2007 Final Office Action

REMARKS

In response to the final Office Action dated November 27, 2007, the Assignee respectfully requests reconsideration based only on the following remarks. The Assignee respectfully submits that the proposed combination of *Feig*, *Hui*, and *Chayes* "teaches away" and cannot support a *prima facie* case for obviousness. The Assignee thus respectfully requests removal of the final action.

Claims 1-20 are pending in this application.

Rejection of Claims 1-5, 7-12 & 16-20 under § 103

The Office rejected claims 1-20 under 35 U.S.C. § 103 (a) as being obvious over U.S. Patent Application Publication 2006/0041679 to Feig in view of U.S. Patent Application Publication 2005/0094725 to Hui and further in view of U.S. Patent Application Publication 2004/0267686 to Chayes, *et al.*

The proposed combination of *Feig* with *Chayes*, however, requires impermissible changes. If the proposed combination changes the principle of operation of the prior art being modified, then the teachings of the references are not sufficient to support a *prima facie* case. See M.P.E.P. at § 2143.01.

The Examiner's *prima facie* case requires impermissible changes to either *Feig's* or *Chayes'* principles of operation. *Feig's* principle of operation is to strip individual frames from a multimedia file and then packetize the frames. *Chayes'* principle of operation is to obtain "newsgroup data," create a "weighted graph" of the newsgroup data, "recursively" segment the weighted graph into clusters, and then output the results. If the teachings of *Chayes* are combined with *Feig*, as the Office proposes, then *Feig's* principle of operation must be impermissibly changed.

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The Assignee has previously explained *Feig's* principle of operation. *Feig* strips individual frames from a multimedia file and then packetizes the frames. See U.S. Patent Application Publication 2006/0041679 to *Feig* at paragraph [0040]. As *Feig* explains, a "multimedia file having groups of data is stored in an application server." *Id.* at paragraph [0040]. "Each group ... corresponds to a single video frame." *Id.* (emphasis added). The "application server buffers the stripped groups [e.g., frames] in a staging buffer." See *id.* at paragraph [0042]. The "application server transfers ... the consecutive groups [e.g., frames] ... to a streaming server." *Id.* "[T]he streaming server converts the consecutive groups [e.g., frames] into a standard streaming format," such as the TCP protocol. *Id.* "[T]he streaming server sends the converted groups [e.g., frames] to the client apparatus." *Id.* See also paragraphs [0050], [0055], and [0058].

Chayes' principle of operation is to generate "a weighted cluster graph of newsgroups utilizing cross-posting information." U.S. Patent Application Publication 2004/0267686 to *Chayes, et al.* at paragraph [0044]. *Chayes* first explains that "newsgroup data" is received. *Id.* at paragraph [0044]. Although the newsgroup data can be "formatted in any suitable manner," *id.* at [0044], *Chayes* only teaches receiving the "newsgroup data" as "matrices and arrays." *Id.* at paragraphs [0045], [0046], and [0058] – [0060]. A "weighted graph" is then generated, "which depicts relatedness of two or more newsgroups." *Id.* at paragraph [0048]. The "newsgroups [are] represented as vertices and [the] cross-posts [are] represented as edges." *Id.* at paragraph [0063]. The weighted graph is then "recursively segmented into clusters" of highly related newsgroups using a clustering algorithm (such as "spectral clustering algorithms"). *Id.* at paragraph [0066]. See also U.S. Patent Application Publication 2004/0267686 to *Chayes, et al.* at paragraphs [0052] and [0053]. After segmentation, clusters are merged if substantially related to one another. See *id.* at paragraph [0067].

Chayes explains that "recursive segmentation" of the weighted graph is determined using eigenvectors. See *id.* at paragraphs [0075] and [0078]. "Prior to performing any segmentation, a segmentation value is defined and vertices of a weighted graph are divided into at least two segments." *Id.* at paragraph [0079]. Eigenvectors are computed and an "Mcut ratio" is

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computed. *Id.* at paragraphs [0081] and [0082]. The “Mcut ratio” is compared to a threshold for determining cluster sizes. *Id.* at paragraphs [0083] through [0086].

Any proposed combination of *Feig* with *Chayes*, then, is impermissible. As the above paragraphs illustrate, if *Chayes* is combined with *Feig*, as the Office proposes, then either *Feig*’s or *Chayes*’ principle of operation must be impermissibly changed. For example, because *Chayes* only teaches receiving “newsgroup data” as “matrices and arrays,” *Feig*’s principle of operation must be changed to receive a matrix of newsgroup information and somehow “strip” video frames from the matrix. Conversely, *Chayes*’ principle of operation would have to be changed to receive a matrix of video frames that has been “stripped” from newsgroup data. Either of these changes is impermissible.

Regardless, even more changes are required. Because *Feig* strips video frames from a multimedia file, *Chayes*’ principle of operation must be impermissibly changed to generate a “weighted graph” from these stripped video frames. This weighted graph would have to depict relatedness of two or more “stripped frames,” such that the stripped frames are “represented as vertices and [the] cross-posts [are] represented as edges.” *See Chayes*, at paragraph [0063]. Clearly, as video frames do not contain “cross-posts” (as newsgroups supposedly would), *Chayes*’ principle of operation must be changed to process this non-existent information. Moreover, *Chayes*’ principle of operation must also be impermissibly changed to segment the hypothetical weighted graph of “stripped frames” into “clusters” using a clustering algorithm. *See Chayes*, at paragraph [0066]. Somehow *Chayes*’ principle of operation must be impermissibly changed to compute eigenvalues on non-existent information, determine an “Mcut ratio” using non-existent information, and then compare to a threshold.

Clearly, then, *Feig* cannot be combined with *Chayes* without making substantial changes. If *Chayes* is combined with *Feig*, as the Office proposes, then either *Feig*’s or *Chayes*’ principle of operation must be changed. Because the patent laws forbid changing a principle of operation to support a *prima facie* case, any proposed combination of *Feig* with *Chayes* cannot support a

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prima facie case for obviousness. The Office is respectfully requested to remove the § 103 rejection of claims 1-20 based on any proposed combination of *Feig* with *Chayes*.

If any issues remain outstanding, the Office is requested to contact the undersigned at (919) 469-2629 or scott@scottzimmerman.com.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Scott P. Zimmerman', with a stylized flourish at the end.

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